

THE ASIATIC SPECIES OF BIRDS OF THE GENUS CRINIGER (PYCNONOTIDAE)

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Among the birds of tropical Asia, few groups can have been the subject of so many revisions with such diverse results as the forms of the pycnonotine genus *Criniger*. In the course of studies made in connection with work on the bulbuls for the continuation of the late J. L. Peters's "Check-list of Birds of the World," I have found that there has been no agreement among the several authors even as to the number of species involved, and it has frequently proved quite impossible for me to decide which form was meant by a name used in a particular instance. In the circumstances, I have been compelled to make a wholly new study based upon personal examination of hundreds of specimens and of many of the pertinent types, and here present a new arrangement that will, I believe, settle most of the previously doubtful points of relationship within the group. Six species (five of them polytypic) are accepted, each of which appears to be somewhere sympatric with one or more of the others, but in the pages to follow will be found no comment on the two uncontroversial species, *finchii* Salvadori, 1871, and *phaeocephalus* (Hartlaub), 1844.

CRINIGER FLAVEOLUS (Gould), 1836

Criniger flaveolus flaveolus (GOULD).

Trichophorus flaveolus GOULD, Proc. Zool. Soc. London, pt. 4, No. 37, April 9, 1836, p. 6 ("in montibus Himalayensibus, in Nepaliâ, &c."; type locality restricted to Nepal, by Koelz, Contr. Inst. Reg. Expl., No. 1, 1954, p. 10).

Trichophorus xanthogaster HODGSON, in J. E. Gray, Zoological Miscellany, No. 3, "June" 1844, p. 83 (Nepal). *Nomen nudum*.

Lanius xanthogaster "Hodgs." BOWDLER SHARPE, Catalogue of the Birds in the British Museum, vol. 6, 1881, p. 77 (Nepal). In synonymy with *Criniger flaveolus* (Gould), not *Criniger xanthogaster* Cassin, 1855.

Trichophorus xanthogaster "Hodgs." BOWDLER SHARPE, Catalogue of the Birds in the British Museum, vol. 6, 1881, p. 77 (Nepal). In synonymy with *Criniger flaveolus* (Gould), not *Criniger xanthogaster* Cassin, 1855.

Criniger flaveolus viridulus KOELZ, Contr. Inst. Reg. Expl., No. 1, September 24, 1954, p. 10 (Sangau, Lushai Hills, Assam State, India).

Criniger flaveolus aureolus KOELZ, Contr. Inst. Reg. Expl., No. 1, September 24, 1954, p. 10 (Kohima, Naga Hills, Assam State, India).

Range.—The sub-Himalayas from Garhwal to easternmost Assam, south through Assam to Arakan, the Chin Hills, central and north-eastern Burma.

Criniger flaveolus burmanicus OATES.

Criniger burmanicus OATES, Fauna of British India, Birds, vol. 1, December 1889, p. 256 ("Toungngoo; the Karen hills; Karennee; Tenasserim, as far south as Meetan at the base of Muleyit mountain, and throughout the Thungyeen valley"; type locality commonly restricted to Toungoo District, Pegu Division, Burma).

Range.—Southeastern Burma (the valley of the Salween from the Northern Shan States to its mouth in the Amherst District of Tenasserim) and western Thailand (valleys of the Mae Moei [Thaungyin] and the Mae Klong).

Remarks.—*Criniger flaveolus burmanicus* seems to be sympatric in central Tenasserim with *Criniger pallidus robinsoni* and *Criniger ochraceus ochraceus*, and in southwestern Thailand with *Criniger ochraceus ochraceus*.

CRINIGER PALLIDUS Swinhoe, 1870

Criniger pallidus pallidus SWINHOE.

Criniger pallidus SWINHOE, Ibis, ser. 2, vol. 6, No. 22, April 1870, p. 252 (Hainan).

Pinarocichla schmackeri STYAN, Bull. Brit. Orn. Club, vol. [1], No. 2, November 1, 1892, p. vi (Hainan).

Range.—Hainan.

Criniger pallidus henrici OUSTALET.

Criniger Henrici OUSTALET, Bull. Mus. Hist. Nat. [Paris], vol. 2, No. 5, June 22, 1896, p. 185 ("entre Manhao et Se-mao [Yunnan], sur les bords de la Rivière-Noire . . . à Nam-Xong, Ban-Moi et Hat-Hoa [Tonkin]").

Criniger pallida grandis STUART BAKER, Bull. Brit. Orn. Club, vol. 38, No. 228, December 4, 1917, p. 15 (Yunnan Province, China; type specimens from Yuankiang [lat. 23°37' N., long. 102°01' E.]).

Range.—Southern Yunnan (valleys of the Red and Black Rivers), Tongking, northernmost Annam, northwestern Laos, Southern Shan States (valley of the Mae Khong), and northern Thailand.

Criniger pallidus robinsoni TICEHURST.

Criniger tephrogenys robinsoni TICEHURST, Bull. Brit. Orn. Club, vol. 53, No. 362, October 31, 1932, p. 19 (Ye, Amherst District, Tenasserim Division, Burma).

Range.—Southern Burma (the Amherst District of Tenasserim) and (probably) northwestern Thailand.

Remarks.—This form was based upon three faded specimens in London, collected in the Amherst District during the 1870's; two of them, including the type, are apparently immature, differing from an obvious adult by paler, brighter, and more gold-suffused coloration above and below, and by the slight development of the gular feathers.

The length of crest feathers and tail of the adult show that it belongs rather with *pallidus* than with *bres* ("*tephrogenys*" of Ticehurst), and making allowances for its quite serious fading, it appears to represent a population intermediate between *henrici* and *griseiceps*.

An apparent difficulty arises from the fact that *griseiceps* is until now reported only from the Pegu Yomas, *robinsoni* only from the Amherst District of Tenasserim, and *henrici* from nowhere south and west of Doi Ang Ka (lat. 18°35' N., long. 98°30' E.) in northwestern Thailand; thus the three populations seem to be quite isolated from each other. Yet it is difficult to believe that the intervening territory, so suitable for the species, should wholly lack some representative of the group, and the suspicion that the vacuum is more imaginary than real is supported by the existence of a unique skin (M.C.Z. No. 196535) from Doi Ang Ka that can be separated from *griseiceps* only by having the crest feathers colored quite as in *henrici*, without the least grayish wash. A second indication of probable intergradation between the two, and one further strengthening the view that *robinsoni* is an intergradient population, is the fact that, of the two faded paratypes of *robinsoni* now before me in Washington, while the adult has the crest faintly washed with gray (as if approaching *griseiceps*), the immature has it red-brown (as if approaching *henrici*).

For the present, I consider *griseiceps* a geographically and chromatically extreme representative of *Criniger pallidus*, with which it is connected in conventional fashion through *robinsoni*.

Criniger pallidus robinsoni seems to be sympatric in the Amherst District with *Criniger flaveolus burmanicus* and *Criniger ochraceus ochraceus*.

Criniger pallidus griseiceps HUME.

Criniger griseiceps HUME, Stray Feathers, vol. 1, No. 6, December 1873, p. 478 ("Upper Pegu," Burma).

Range.—Southern Burma (Pegu Yomas).

Remarks.—This race is very strongly marked compared with others of the species. Its mantle is greener (but wholly lacking the golden tone appearing in *Criniger fl. burmanicus*); its crest is strongly suffused with gray, although basically a dull red-brown as in the rest.

Another peculiarity is its suffusion of pinkish buff, which affects the throat, the ground color of the under parts, and the tones of the crest and upper parts, but a similar suffusion appears in slight degree also in some skins of *henrici* from western Thailand. In the circumstances, and because of the specimen from Doi Ang Ka discussed above, *griseiceps* seems to be properly placed in the species *pallidus*.

Criniger pallidus isani, subsp. nov.

Type.—U.S.N.M. No. 459700, adult male, collected at Ban Muang Khai (lat. 17°30' N., long. 101°20' E.), Loei Province, Thailand, on January 14, 1955, by Robert E. Elbel; original number RE 4470.

Diagnosis.—Nearest *Criniger pallidus henrici*, from which it is separable by having the olivaceous brown of the mantle decidedly paler and grayer.

Range.—Eastern Thailand (Loei and Phetchabun Provinces).

Remarks.—Although no representative of the genus had previously been reported from the Phaya Dong Fai Mountains, I have recently acquired no fewer than 24 specimens of this new race from several localities in the northwestern portion of the eastern plateau of Thailand, and the bird will certainly be found to possess a much more extensive range.

Criniger pallidus annamensis DELACOUR AND JABOUILLE.

Criniger tephogenys annamensis DELACOUR AND JABOUILLE, Bull. Brit. Orn. Club, vol. 45, No. 291, December 5, 1924, p. 32 (Lao Bao, Quangtri Province, Annam).

Range.—Central Annam, intergrading in northern Annam (Phu Qui) with *henrici*, and in south-central Annam (Dak To, Kontoum) with the next following race; central Laos, from Chiang Khwang southeastward to Lao Bao.

Criniger pallidus khmerensis, subsp. nov.

Type.—U.S.N.M. No. 360999, adult male, collected at Banteai Srei (lat. 13°16' N., long. 104°07' E.), Siem Reap Province, Cambodia, in January 1940, by Joseph F. C. Rock; original number 1292A.

Diagnosis.—Nearest *Criniger pallidus annamensis*, but separable by the brighter, more purely yellow (less buff-suffused) under parts and the much more golden-olive (less brownish-olive) mantle.

Range.—Southern Annam (Phanrang and Haut-Donai Provinces), Cambodia, and southern Laos (Saravane Province).

Remarks.—*Criniger pallidus khmerensis* seems to be sympatric in southern Annam with *Criniger ochraceus* subsp. nov. (named just below).

CRINIGER OCHRACEUS Moore, 1854

Criniger ochraceus hallae, subsp. nov.

Type.—Brit. Mus. Reg. No. 1928.6.26.834, adult male, collected at Tay Ninh (lat. $11^{\circ}18'$ N., long. $106^{\circ}07'$ E.), Tay Ninh Province, Cochin-China, on January 15, 1928, by Jean Delacour and Willoughby P. Lowe (Franco-British Indo-China Fourth Expedition); original number 1767.

Diagnosis.—Nearest *Criniger ochraceus cambodianus*, from which it differs by having the mantle less grayish, more strongly suffused with olivaceous, and the under parts much brighter, strongly suffused with creamy- or yellow-buff.

Range.—Southern Annam (Haut-Donai Province) and Cochin-China (Bien Hoa and Tay Ninh Provinces).

Remarks.—This isolated population (named for Mrs. B. P. Hall of the British Museum, Nat. Hist.) has until now been placed with the nominate race of Tenasserim, from which it is of course quite distinct.

It is apparently sympatric in southern Annam with *Criniger pallidus khmerensis*.

Criniger ochraceus cambodianus DELACOUR AND JABOUILLE.

Criniger gutturalis cambodianus DELACOUR AND JABOUILLE, Bull. Brit. Orn. Club, vol. 48, No. 325, July 10, 1928, p. 130 (Le Boc Kor [lat. $10^{\circ}37'$ N., long. $104^{\circ}03'$ E.], Kampot Province, Cambodia).

Range.—Southwestern Cambodia (Chaîne de l'Éléphant) and southeastern Thailand.

Criniger ochraceus ochraceus MOORE.

Criniger ochraceus MOORE, in Horsfield and Moore, Catalogue of the Birds in the Museum of the Hon. East-India Company, vol. 1, 1854, pp. xv [*nomen nudum*], 252 (Tenasserim Division, Burma; type locality here restricted to Mergui [lat. $12^{\circ}26'$ N., long. $98^{\circ}36'$ E.], Mergui District).

Criniger ochraceus crinitus DEIGNAN, Journ. Washington Acad. Sci., vol. 44, No. 4, May 3, 1954, p. 125 (Ban Hin Laem [lat. $14^{\circ}40'$ N., long. $98^{\circ}40'$ E.], Kanchanaburi Province, Thailand).

Range.—Tenasserim from the Amherst District (Ye) south to the Mergui District (Tenasserim Town), and southwestern Thailand (valley of the Mae Klong and south in the forest to Prachuap Khiri Khan Province [Khao Luang]).

Remarks.—Since two races of *ochraceus* appear in Tenasserim, it has been necessary to restrict Moore's type locality. Comparison of the type specimen in London with others has shown that nominate *ochraceus* occurs as far south as Tenasserim Town, and one specimen from that place is even very like the type itself in its deep coloration.

Accordingly, Mergui, still farther north and the provenience of a number of Helfer's skins, may be considered a suitable *terra typica*.

Criniger ochraceus ochraceus seems to be sympatric in central Tenasserim with *Criniger pallidus robinsoni* and *Criniger flaveolus burmanicus*, and in southwestern Thailand with *Criniger flaveolus burmanicus*.

Criniger ochraceus sordidus RICHMOND.

?*Criniger Cabanisi* A. MÜLLER, Die Ornithologie der Insel Salanga, [ante October 4] 1882, p. 32 (Phuket [lat. 7°55' N., long. 98°25' E.], Phuket Province, Thailand).

?*Criniger Cabanisi* A. MÜLLER, Journ. für Orn., Jahrg. 30, No. 160, November 1882, p. 384 (Phuket, Phuket Province, Thailand).

Criniger sordidus RICHMOND, Proc. U.S. Nat. Mus., vol. 22, No. 1201, May 12, 1900, p. 320 (Khao Soi Dao [lat. 7°20' N., long. 99°50' E.], Trang Province, Thailand).

?[*Criniger*] *salanga* BOWDLER SHARPE, Hand-list of the Genera and Species of Birds, vol. 3, 1901, p. 316. New name for *Criniger Cabanisi* A. Müller, Journ. für Orn., Jahrg. 30, No. 160, November 1882, p. 384 (Phuket, Phuket Province, Thailand), not *Criniger cabanisi* Bowdler Sharpe, "1881" [1882].

Range.—The Mergui Archipelago (Ross, Sullivan, and St. Matthew's Islands) and mainland Tenasserim from the head of Pak Chan Estuary to Victoria Point; Thailand from Sathani Map Ammarit (lat. 10°50' N., long. 99°20' E.) south through the Malay Peninsula into northwestern Malaya (Perlis State and the Langkawi Islands).

Remarks.—*Criniger ochraceus sordidus* has lain in synonymy with the nominate race for many years, but it is readily distinguished in series by its darker upper parts and more ochraceous, less buffy, under parts. Most discussion of this form has been based upon skins from the Merguis and Tenasserim and from the Siamese side of the Isthmus of Kra, all of which are, strictly speaking, *sordidus* > *ochraceus*, and therefore misleading for taxonomic purposes.

This form is apparently sympatric in southernmost Tenasserim, peninsular Thailand, and northwestern Malaya with *Criniger bres tephrogenys*.

Criniger ochraceus sacculatus ROBINSON.

Criniger ochraceus sacculatus ROBINSON, in Robinson and Boden Kloss, Ibis, ser. 10, vol. 3, No. 4, October 8, 1915, p. 746 (Ginting Bidei [lat. 3°18' N., long. 101°50' E.], Selangor State, Malaya).

Range.—Malaya, from northern Perak south to Negri Sembilan and Pahang.

Remarks.—*Criniger ochraceus sacculatus* is apparently sympatric in Malaya with *Criniger bres tephrogenys*. It is frequently stated that the former is a hill form, while the latter is one of the lowlands,

but it should be noted that *sacculatus* ranges principally between 2,500 and 4,500 feet, while *tephrogenys* "is met with on the hills of Negri Sembilan, and on Kedah Peak, and also on the hills of Patani up to about 3000 feet" (Robinson, Birds of the Malay Peninsula, vol. 2, 1928, p. 163). Both forms have been taken at Ginting Bidei at an elevation of 2,300 feet.

Criniger ochraceus sumatranus WARDLAW RAMSAY.

Criniger sumatranus WARDLAW RAMSAY, Ann. and Mag. Nat. Hist., ser. 5, vol. 10, No. 60, December 1882, p. 431 ("M[ount]. Sago" [ca. 70 miles northeast of Padang, which lies at lat. 0°58' S., long. 100°21' E.], Sumatra).

Range.—Highlands of western Sumatra.

Criniger ochraceus ruficrissus BOWDLER SHARPE.

Criniger ruficrissus BOWDLER SHARPE, Proc. Zool. Soc. London, for 1879, pt. 2, August 1879, p. 248 (Kina Balu [lat. 6°05' N., long. 116°30' E.], North Borneo).

Range.—Highlands of northern Borneo.

Remarks.—Although some authorities prefer to treat *ruficrissus* as a monotypic species, I look upon it as merely a strongly marked geographical representative of *ochraceus*. It is apparently sympatric in northern Borneo with *Criniger bres gutturalis* (see Finsch, Notes from the Leyden Museum, vol. 26, 1905, p. 106).

CRINIGER BRES (Lesson), 1832

Criniger bres tephrogenys (JARDINE AND SELBY).

Trichophorus tephrogenys JARDINE AND SELBY, Illustrations of Ornithology, ser. 1, vol. 3, pt. 9, February 1833, pl. 127 and text ("... though we are uncertain of its locality, we suspect it to be Indian"; type locality corrected to Malacca, by Hartert, Nov. Zool., vol. 9, 1902, p. 558).

Range.—Southern Tenasserim (one specimen from the Mergui District in Liverpool, *ex* Coll. Tristram); peninsular Thailand southward from the Isthmus of Kra; Malaya; lowlands of eastern Sumatra.

Remarks.—*Criniger bres tephrogenys* is apparently sympatric in southern Tenasserim and peninsular Thailand with *Criniger ochraceus sordidus*, and in Malaya with *Criniger ochraceus sacculatus*.

Criniger bres gutturalis (BONAPARTE).

[*Trichophorus*]. *gutturalis* "Müll. Mus. Lugd." BONAPARTE, Consp. Gen. Av., vol. 1, 1850 or 1851, p. 262 (Borneo type specimen from Banjarmasin [lat. 3°20' S., long. 114°35' E.], *vide* Finsch, Notes from the Leyden Museum, vol. 26, 1905, p. 105).

Range.—Borneo.

Remarks.—This form is apparently sympatric in northern Borneo with *Criniger ochraceus ruficrissus* (see Finsch, *loc. cit.*, p. 106).

Criniger bres frater BOWDLER SHARPE.

Criniger frater BOWDLER SHARPE, Trans. Linn. Soc. London, ser. 2, vol. 1, pt. 6, November 1877, p. 334 (Puerto Princesa, Paláwan Island, Philippine Islands).

Range.—Paláwan.

Criniger bres bres (LESSON).

Turdus gularis HORSFIELD, Trans. Linn. Soc. London, vol. 13, pt. 1, May 1821, p. 150 (Java).

Lanius Bres LESSON, in Bélanger, Voyage aux Indes-Orientales, pt. 4, August 1832, p. 255 (Java; type locality here restricted to Bogor [Buitenzorg]).

New name for *Turdus gularis* Horsfield, Trans. Linn. Soc. London, vol. 13, pt. 1, May 1821, p. 150 (Java), not *T[urdus]. gularis* Latham, 1801.

Trichophorus xanthizurus OBERHOLSER, Smithsonian Misc. Coll., Quarterly Issue, vol. 48, No. 2, July 1, 1905, p. 152. New name for *Turdus gularis* Horsfield (*vide supra*), not *T[urdus]. gularis* Latham, 1801.

Criniger balius bartelsi COLLIN AND HARTERT, Nov. Zool., vol. 34, No. 1, August 10, 1927, p. 51. New name for *Turdus gularis* Horsfield (*vide supra*), not *T[urdus]. gularis* Latham, 1801.

Range.—Western and central Java.

Remarks.—Since two forms of the species are known from Java, it is important to know which one is represented by Lesson's type specimen. Bélanger (Voyage, pp. xxix-xxx) says: ". . . j'entrepris, . . . un nouveau voyage aux îles de la Sonde. Le détroit de ce nom, une partie de la côte orientale de Java, les districts de Bantam et de Buitenzorg dans cette île, furent les lieux principaux soumis à mes recherches." In short, Bélanger's collections were made within the ranges of *both* races.

It is no longer possible to solve the problem by examination of Bélanger's material. In reply to my query, Professor Berlioz has written: "I am sorry to say definitely that we do not possess this type of Lesson nor any bird which might be eventually considered as such. In fact there are extremely few birds here originated in Bélanger's travel—and in very bad condition—and if ever this bird came to our Museum it is not impossible that it would have been destroyed, as there is no trace of it even in our old register."

In the circumstances, I am justified in fixing a type locality for Lesson's *bres*, and have chosen Bogor (Buitenzorg) as a place visited by Bélanger and one at which commonly occur birds clearly assignable to the more western race.

Criniger bres balius STRESEMANN.

Criniger gularis balius STRESEMANN, Nov. Zool., vol. 20, No. 2, June 17, 1913, p. 358 (Gitgit, Bali Island).

Range.—Eastern Java and Bali.

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